



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,738	04/26/2005	Marcus Burgel	2002P16717WOUS	9005

7590 02/21/2008
Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

WONG, JOSEPH D

ART UNIT	PAPER NUMBER
----------	--------------

2168

MAIL DATE	DELIVERY MODE
-----------	---------------

02/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/532,738

Applicant(s)

BURGEL ET AL.

Examiner

Joseph D. Wong

Art Unit

2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 Apr 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claims 8-24 are amended. No claims are new.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 USC 112, 1st paragraph. The claims 8 and 21 contain subject matter "without translation" which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 9-20 depend from claim 8. See MPEP 2173.05(i)(paragraph 3). This ground of rejection is necessitated by the instant claim amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-9, 12-13, 15-17, 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, US Patent 6,591,272 B1, filed 22 Feb. 2000 in view of Cheyer et al., US Patent 6,859,931 B1, filed 17 Mar 1999, hereinafter Cheyer.

Regarding claim 8, Williams teaches system for structuring (interpreted to include "ORGANIZATION", Col. 91, Lines 55), storing (interpreted to include "inserts", Col. 60, Lines 40-45) and processing of computer-readable data in accordance with a generic object model (Fig. 5), wherein the object model has at least one first element which corresponds to a type object (Fig. 4), wherein the type object (Fig. 4-5) comprises the following attributes (Fig. 14): a unique identification of an object of the type Object for absolute referencing of the object (interpreted to include "CustomerID", Fig. 14), a logical name for labeling the object (interpreted to include "Base Object Name", Fig. 14), and at least one link to a second element, which corresponds to a type Feature wherein the processor is further adapted to process the type the type Feature (interpreted to include "SalesPersonID", Fig. 14), (interpreted to include "Employee_ID", Fig. 15), wherein the type Feature to produce the following attributes in type Feature: a unique name in relation to the object (interpreted to include "Base Object Name", Fig. 15), and a linkage to at least one of the following: further components of the type Object (interpreted to include "ManagerID", Fig. 15), further components of the type Feature (interpreted to include "Employee_ID, Fig. 15), and to computer-readable data (interpreted to include "LAST_NAME", Fig. 15).

Williams does not explicitly teach an object-based system for structuring, storing, and processing of computer-readable data from a plurality of distinct software applications, said

computer-readable data comprising hierarchically structured data set objects stored in at least one object database, said computer-readable data subject to one or more incompatible data exchange structures in the plurality of distinct software applications, said data to be changed between the plurality of distinct software applications without translating said computer-readable data.

However, Cheyer teaches an object-based (Title) system for structuring, storing, and processing of data from a plurality of distinct software applications (Fig. 3, items 310, 320), said data comprising hierarchically structured data set objects stored in at least one object database (Fig. 7, items 704, 706, 720), said data subject to one or more incompatible data exchange structures (interpreted to include “protocol incompatible with the ICL by one of the components”, Claim 11) in the plurality of distinct software applications (Fig. 3, items 310, 320), said data to be changed between the plurality of distinct software applications in accordance with a generic object model. (Col. 22, Lines 44-65; Col. 23, Lines 1-15)

Williams and Cheyer are analogous art pertinent to the problem to be solved. A skilled artisan would have been motivated to extend the teachings of Williams with Cheyer because it greatly expands the flexibility and capabilities of the distributed agent community as discussed in the abstract of Cheyer.

Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine the teachings of Williams with Cheyer because it greatly expands the flexibility and capabilities of the distributed agent community as suggested in the abstract of Cheyer.

According to MPEP 2144.04, omission of an element and its function of “translating” is obvious if the function of the element is not desired thus “without translating said computer-

readable data” is rendered obvious because the argument mentions being free of an undesirable element such as being free of incompatible data. Therefore the limitation of “without translation of said computer data” appears to be met.

The arguments that the reference teaches away incorrectly quote what Cheyer **must do** instead of what Cheyer **can do**. The arguments alleges a definition of "teaching away" that appears contrary to MPEP 2123 definition of criticize, discredit or discourage translation of said computer data. Mere presentation of an option or alternative is not a teaching away.

Regarding claim 9, Williams teaches the system in accordance, wherein the type Object has as further attributes an identification of the object type (Fig. 14) and an identification of the version of the object. (Col. 10, Lines 44-45)

See under claim for 8 further analysis and discussion.

Regarding claim 12, Williams teaches the system in accordance, wherein the elements of the object are linked by references. (Col. 11, Line 45; Col. 26, Line 20)

See under claim for 8 further analysis and discussion.

Regarding claim 13, Williams teaches the system in accordance, wherein the elements of the object are linked by references. (Col. 11, Line 45; Col. 53, Lines 5-15)

See under claim for 8 further analysis and discussion.

Regarding claim 15, Williams teaches the system in accordance, wherein the object model is described by an extensible markup language. (interpreted to include "XML", Col. 9, Lines 22-23)

See under claim for 8 further analysis and discussion.

Regarding claim 16, Williams teaches the system in accordance, wherein the object model is described by an extensible markup language. (interpreted to include "XML", Col. 9, Lines 22-23)

See under claim for 8 further analysis and discussion.

Regarding claim 17, Williams teaches the system in accordance, wherein the object model is described by an extensible markup language. (interpreted to include "XML", Col. 9, Lines 22-23)

See under claim for 8 further analysis and discussion.

Regarding claim 19, Williams teaches the system in accordance, wherein the object model is described by an extensible markup language. (interpreted to include "XML", Col. 9, Lines 22-23)

See under claim for 8 further analysis and discussion.

Regarding claim 20, Williams teaches the system in accordance with claim 8, wherein the system is part of an engineering system of an automation system. (Col. 9, Lines 23-24, Lines 37-38; Col. 12, Lines 43-45)

See under claim for 8 further analysis and discussion.

Regarding claim 21, Williams teaches a method for structuring (interpreted to include "ORGANIZATION", Col. 91, Lines 55), storing (interpreted to include "inserts", Col. 60, Lines 40-45) and processing data in accordance with a generic object model (Fig. 5), wherein the object model has at least one first element corresponding to the type Object (Fig. 4-5), wherein the type Object (Fig. 4-5) comprises the following attributes (Fig. 14): a unique identification of an object of the type Object for absolute referencing (interpreted to include the "primary key", Col. 12, Line 58) of the object (interpreted to include "CustomerID", Fig. 14), a logical name for labeling the object (interpreted to include "Base Object Name", Fig. 14), and at least one link to a second element (interpreted to include "SalesPersonID", Fig. 14), which corresponds to a type Feature (interpreted to include "Employee_ID", Fig. 15), the method comprising: assigning a unique identification (interpreted to include "Employee_ID", Fig. 15) to an instance of the type Object for absolute referencing the instance (interpreted to include "Base Object Name", Fig. 15); assigning a logical name for labeling the instance (interpreted to include "BaseObject", Col. 53, Line 30); and linking the instance to the second element (interpreted to include "DEPARTMENT_ID", Col. 60, Lines 50-55), wherein the type Feature comprising the following attributes: a unique name in relation to the relevant linked object referenced, and the option of linkage to further components of the type Object (interpreted to include "JOB_ID",

Col. 60, Lines 55-60), to further components of the type Feature (interpreted to include "LOCATION_ID", Col. 60, Lines 50-65), and to data (interpreted to include "HIRE_DATE", Col. 60, Lines 50-65).

Williams does not explicitly teach an object-based system for structuring, storing, and processing of data from a plurality of distinct software applications, said data comprising hierarchically structured data set objects stored in at least one object database, said data subject to one or more incompatible data exchange structures in the plurality of distinct software applications, said data to be changed between the plurality of distinct software without translating said computer-readable data.

However, Cheyer teaches an object-based (Title) system for structuring, storing, and processing of data from a plurality of distinct software applications (Fig. 3, items 310, 320), said data comprising hierarchically structured data set objects stored in at least one object database (Fig. 7, items 704, 706, 720), said data subject to one or more incompatible data exchange structures (interpreted to include "protocol incompatible with the ICL by one of the components", Claim 11) in the plurality of distinct software applications (Fig. 3, items 310, 320), said data to be changed between the plurality of distinct software applications. (Col. 22, Lines 44-65; Col. 23, Lines 1-15)

See under claim for 8 analysis and discussion of amended limitation "without translating said computer-readable data".

See under claim for 8 further analysis and discussion.

Regarding claim 22, Williams teaches the method in accordance, wherein the data are structured (Col. 91, Lines 55), stored (Col. 60, Lines 40-45), and processed for engineering an automation system. (Col. 9, Lines 23-24, Lines 37-38; Col. 12, Lines 43-45)

See under claim for 8 further analysis and discussion.

Regarding claim 23, Williams teaches a method for structuring, storing and processing of data in accordance with a generic object model (Fig. 5), wherein the object model has at least one first element which corresponds to the type Object (Fig. 4-5), the method comprising: providing a unique identification of an object of the type Object for absolute referencing (interpreted to include the “primary key”, Col. 12, Line 58) of the object (interpreted to include “CustomerID”, Fig. 14); providing a logical name for labeling the object (interpreted to include “Base Object Name”, Fig. 14); and linking the object to a second element (interpreted to include “SalesPersonID”, Fig. 14), which corresponds to a type Feature (interpreted to include “Employee_ID”, Fig. 15), wherein the type Feature (interpreted to include “Employee_ID”, Fig. 15) comprising: a unique name in relation to the linked object (interpreted to include “Base Object Name”, Fig. 15), and the option of linkage to further components of type Object (interpreted to include “JOB_ID”, Col. 60, Lines 55-60), to further components of type Feature (interpreted to include “LOCATION_ID”, Col. 60, Lines 50-65) and to data (interpreted to include “HIRE_DATE”, Col. 60, Lines 50-65).

Williams does not explicitly teach an object-based system for structuring, storing, and processing of data from a plurality of distinct software applications, said data comprising hierarchically structured data set objects stored in at least one object database, said data subject

to one or more incompatible data exchange structures in the plurality of distinct software applications, said data to be changed between the plurality of distinct software applications in accordance with a generic object model.

However, Cheyer teaches an object-based (Title) system for structuring, storing, and processing of data from a plurality of distinct software applications (Fig. 3, items 310, 320), said data comprising hierarchically structured data set objects stored in at least one object database (Fig. 7, items 704, 706, 720), said data subject to one or more incompatible data exchange structures (interpreted to include "protocol incompatible with the ICL by one of the components", Claim 11) in the plurality of distinct software applications (Fig. 3, items 310, 320), said data to be changed between the plurality of distinct software applications in accordance with a generic object model. (Col. 22, Lines 44-65; Col. 23, Lines 1-15)

See under claim for 8 further analysis and discussion.

Regarding claim 24, Williams teaches the method in accordance, wherein the data are structured (Col. 91, Lines 55), stored (Col. 60, Lines 40-45), and processed (Fig. 3, item 34) for engineering an automation system. (Col. 9, Lines 23-24, Lines 37-38; Col. 12, Lines 43-45)

See under claim for 8 further analysis and discussion.

Claims 10, 11, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, US Patent 6,591,272 B1, filed 22 Feb. 2000 in view of Cheyer et al., US Patent 6,859,931 B1, filed 17 Mar 1999, hereinafter Cheyer and in view of Devarakonda et al., US Pre-Grant Pub. No/ 2003/0225801 A1, filed 31 May 2002, hereinafter Devarakonda.

Regarding claims 10 and 11, Williams teaches the system in accordance, wherein elements linked by an element of type Feature. (Fig. 2, see type "schema" common to item 20a and 20e, wherein the linkage is denoted with a line and arrow between the items; also Fig. 4, see type "java.util.Vector" as being a type common to two objects of OSFDatabase and OSFBaseTable thereby demonstrating a linkage via a shared ancestry)

Williams and Cheyer do not explicitly teach form a logical subset of all elements of an object.

However, Devarakonda teaches form a logical subset of all elements of an object. ([0035], wherein the "specific container definition consists of a subset of the logical attributes" also illustrated in Fig. 3 whose nexus of item 102a appears to subset a logical subset into item 104a and a physical subset into item 100a)

Williams in view of Cheyer and Devarakonda are analogous art. A skilled artisan would have been motivated to adapt the data structure... "with requirements for storing data" as discussed in the abstract of Devarakonda.

Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine the teachings of Williams in view of Cheyer and Devarakonda to adapt the data structure with requirements for storing data as suggested in the abstract of Devarakonda.

See under claim for 8 further analysis and discussion.

Regarding claim 14, Williams teaches the system in accordance, wherein the elements of the object are linked by references. (Col. 11, Line 45; Col. 52, Lines 62-67; Col. 53, Lines 5-15)
See remarks under claim 10.

See under claim for 8 further analysis and discussion.

Regarding claim 18, Williams teaches the system in accordance, wherein the object model is described by an extensible markup language. (interpreted to include "XML", Col. 9, Lines 22-23)

See under claim for 8 further analysis and discussion.

Response to Arguments

Rejections under 35 USC 101 for claims 8-20 are withdrawn.

Applicant's arguments with respect to the prior art rejections of 35 USC 103 have been carefully considered yet are deemed not persuasive. The argument is not persuasive that the prior art does not teach "without translating such computer-readable data" because this does not appear to be patentably distinct according to MPEP 2144.04. The arguments do not provide secondary considerations to counter the finding of obviousness in removing an element that admittedly appears undesirable prior to the time of invention.

Neither the claim nor the specification appear to address how or why the claimed terminology distinguishes over the prior art's disputed translation capability. Translation

effectively appears to have the same result as understanding as can be best understood by the Examiner because the word translation does not appear to be used in the instant specification.

The argument that Cheyer must translate is shown to be an incorrect characterization of a reference that says "can...translate". Cheyer says "manager can be translated into the following compound request" in Col. 15, Lines 40-41.

The argument that Cheyer teaches away from Williams appears inconsistent with MPEP 2123 because the argument does not cite any criticism, discredit or discouragement of the solution in Williams solution when "teaching away" is defined by MPEP 2123:

"[t]he prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not **criticize, discredit, or otherwise discourage** the solution claimed...." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

Arguments rebutting the prior art rejections are not convincing. The arguments incorrectly quote the prior art of Cheyer by arguing what Cheyer "must translate" when reference says "can...translate". The arguments allege "teaching away" in the face of additional, alternative or optional capabilities within Cheyer. The arguments do not address secondary considerations to counter MPEP 2144.04's which provides that it is obvious to omit elements or steps that pertain to undesirable or costly steps where the incremental step is **translating** and undesirable element is **incompatible data**.

Pursuant to MPEP 2144.04, removal of a translation step from a known process appears obvious. MPEP 2144.04 states: "Omission of an Element and Its Function Is Obvious if the Function of the Element Is Not Desired... *Ex parte Wu* , 10 USPQ 2031 (Bd. Pat. App. & Inter. 1989)". The arguments do not address evidence of criticality, unexpected results, or a concern

that justifies that the amended distinction of "without translating computer readable data" is non-obvious over the prior art.

Accordingly, all prior art rejections are amended as necessitated by the instant claim amendment and maintained.

Conclusion

Applicant's amendment necessitated the amended citations (or new ground(s)) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

If applicant still believes there is patentable subject matter within the disclosure and has reasons why those differences define over the prior art, then applicant can look to MPEP § 324

Application/Control Number:
10/532,738
Art Unit: 2168

Page 15

IV (September 2007) and 37 CFR 1.114 for additional suggestions that may be helpful for overcoming the finality of this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Wong whose telephone number is 571-270-1015. The examiner can normally be reached on Mon.-Thur. 8:30AM - 6:00PM and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

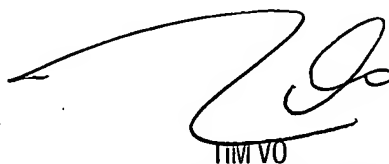
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph D. Wong
TTV/jdw

/JDW/

19 February 2008

Tim T. Vo
SPE, Art Unit 2168



TIM VO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100